DSCOVR High Time Resolution Solar Wind Measurements

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The Deep Space Climate Observatory (DSCOVR), previously known as Triana, spacecraft is expected to be launched in late 2014. It will carry a fluxgate magnetometer, Faraday Cup solar wind detector and a top-hat electron electrostatic analyzer. The Faraday Cup will provide an unprecedented 10 vectors/sec time resolution measurement of the solar wind proton and alpha reduced distribution functions. Coupled with the 40 vector/sec vector magnetometer measurements, the identification of specific wave modes in the solar wind will be possible for the first time. The science objectives and data products of the mission will be discussed.